CS 275
Final Exam Study Guide

A. Basic scheme functions: car, cdr, cons, append, lambda, if, cond, etc.
B. How Lets, Lambdas and Applications are evaluated by the system.
C. Map and Apply
D. Foldl and foldr
E. Unrestricted lambdas
F. Representing data structures
G. Trees
H. Environments
I. Programming language issues
   a. State and set!
   b. Static vs dynamic binding
   c. Procedure calling mechanisms (call-by-value, name, reference, etc.)
J. Our interpreter project
   a. How specific expressions are parsed/evaluated in our Minischeme project
      including
      i. Let
      ii. Lambda
      iii. Procedure applications
   b. What would happen if we did something differently, such as changing from call-by-value to call-by-reference
K. Streams
L. Tail recursions, deep recursions
M. Continuations and continuation-passing style
N. call/cc
O. Nothing on Combinators
P. Nothing on Backtracking